

Amendment
Application No. 10/642,640
Attorney Docket No. 030931

REMARKS

Claims 1, 4-11, 16 and 18-23 are pending in the application. Claims 2, 3, 12-15 and 17 are cancelled. Claims 16 and 18 have been amended. No new matter has been added. In light of the amendments to the claims and the accompanying remarks applicant earnestly solicits favorable reconsideration.

The preamble of claim 16 has been amended in order to further clarify the claim.

On the Merits

Claims 18 and 20-23 are rejected under 35 U.S.C. § 102(e) as being anticipated by *Masuda* (US Publication 2002/0172031).

Independent Claim 18:

Independent claim 18 requires in part:

a touch panel for detecting a touched position; and

a lighting device including a light source, a light guiding part on which light is incident from said light source, and a light guiding and emitting part for guiding light propagated through said light guiding part so as to emit the light as planer planner light, directly to the [[an]] outside of the lighting device, **wherein the light to be guided to the outside** from said light guiding and emitting part is emitted from a side opposite to a side on which the touched position is to be detected, wherein said light guiding and emitting part is a step-like structure formed on a surface of said light guiding part. Emphasis added.

The cited reference *Masuda* discloses a construction in which light incident from a light source is propagated through a light guiding part and the propagated light is guided to the outside

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(a reflective-type liquid crystal display) from a face opposite to a face where a touched position is to be detected (see FIG 24).

According to an example in FIG 24 of *Masuda*, reflecting films 25 are formed in tilted regions 26a1 (see FIG. 21) of a first light guide element 26, and light propagated through a light guide plate 20 is caused by the reflecting films 25 to change its path to the lower side, which is guided to the outside from an emitting surface 22e through a circularly polarizing plate 114.

On the other hand, the present invention teaches (in claim 18) that light is guided to the outside (a reflective-type liquid crystal display) from a light guiding and emitting part which is processed to form a step-like structure on a face of the light guiding part.

Masuda does not teach a "step-like structure" of the present invention (claim 18).

However, the surface 26a of the first guide element 26 which has tilted regions 26a1 and vertical regions 26a2 are being read by the Examiner as a "step-like structure".

However, unlike the present invention which teaches that light is guided directly to the outside with no intervention of the "step-like structure" (light guiding and emitting part), *Masuda* teaches that light is guided out from an emitting surface 22e which is formed as a flat plane, not from the surface 26a. Therefore, even if the Examiner has the above view, the two inventions are obviously different in the construction.

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Additionally, in response to our arguments presented on December 11, 2006, the Examiner indicated that in paragraph 153 of *Masuda* it disclosed that it is well known for the light guiding and emitting part to be a step-like structure formed on the light guiding part, and refers to figures 40A and 40B. However figures 40A and 40B plainly show the “step-like structure” positioned on the side where the touch position is detected, not on a side opposite to where the touch position is detected as required by claim 18.

Because *Masuda* only appears to disclose that the light emitted from a step-like structure must pass through another medium, such as “the first light guide element” (26), or a “second light guide layer” (20b), and claim 18 requires the light to pass directly to the outside of the device, the claimed invention is further distinguished from the cited reference. As such, Applicants respectfully submit claim 18 is in condition for allowance.

Dependent Claims 20-23:

As claims 20-23 ultimately depend upon claim 18, the argument presented above regarding claim 18 also applies to claims 20-23.

Claims 1, 4, 6 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Masuda* in view of *An* (US Publication 2002/0154250).

Independent Claim 1:

The Examiner largely relies on the analysis previously set forth, in rejecting independent claim 1. Regarding the newly added limitation in claim, “wherein said light guiding part and

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light guiding and emitting part constitute a single optically transparent substrate,” the Examiner acknowledges that this feature is not disclosed in any of the cited references, as asserted in our submission on December 11, 2006, but contends this feature would however be obvious.

The Examiner asserts that according to the court case *In re Larson*, “it is well known to integrate plural parts so that they may constitute a unitary whole.” Thus, the Examiner contends that it would have been obvious to integrate the light guiding part, light guiding and emitting part, and the touch panel as taught by *An.*

However while the Examiner’s cited passage is correct, the court also stated that the improvements in the Larson invention were suggested by the cited references.¹ Furthermore, the Board of Patent Appeals and Interferences noted that the new feature in Larson “does not contribute to a better heat transfer in appellants’ construction.”² The court then agreed with the board and stated:

We agree with the board that the claim defines no structure not shown by Tuttle et al. [prior art reference] which would afford an unobvious heat transmission and therefore does not distinguish over the applied reference.³

Thus, it appears that the court is finding the Larson invention obvious because it is providing no improvement over the prior art reference, it is merely combining two parts.

¹ *In re Larson*, 52 C.C.P.A. 930, 935.

² *In re Larson*, 52 C.C.P.A. 930, 934.

³ *In re Larson*, 52 C.C.P.A. 930, 934.

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The present invention on the other hand specifically points out in the specification one of the benefits derived from having the light guiding part and light guiding and emitting part constituting a single substrate. In the Background of the Invention section, on page 4, it states:

In these optical paths, there are four optical interfaces.... Therefore, the incident light is reflected in the respective optical interfaces as indicated by the broken lines in FIG. 2. There is a problem that the reflected light indicated by the broken lines becomes noises and the amount of useful light is reduced and visibility is therefore impaired.

Thus the present invention has the advantage of having fewer optical interfaces which lead to more useful light and better visibility. The Examiner acknowledges this feature is not disclosed in *An*, and furthermore, it does not appear to be suggested by *An* either.

Additionally, as noted in MPEP § 2144.04(V)(B), *Schenck v. Norton Corp.* holds that an integration of parts can be patentably non-obvious. In *Schenck*, the court affirmed the district court's dismissal of the argument that "a consolidation of elements can never rise to the level of patentable invention."⁴ The court noted "nothing of record that would suggest the replacement of [the claimed] structure...."⁵ In the present application, the Examiner has indicated no suggestion in any of the references to have the light guiding part and the light guiding and emitting part, where the light guiding part propagates an ultrasonic wave, be formed in one element.

⁴ *Schenck v. Norton Corp.*, 713 F.2d 782, 784.

⁵ *Schenck v. Norton Corp.*, 713 F.2d 782, 785.

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Thus, similar to *Schenck*, the present invention eliminates a need for two surfaces/parts and replaces it with one surface/part. As indicated earlier, none of the cited reference provides any suggestion of having a light guiding part and light guiding and emitting part be one substrate.

Dependent Claims 4-11:

As claims 4-11 ultimately depend upon independent claim 1, the arguments presented above regarding claim 1 also apply to claims 4-11. As such, Applicants respectfully submit that the Examiner's rejection be withdrawn and claims allowed.

Claims 1, 4, 6 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Masuda* in view of *An* (US Publication 2002/0154250).

Independent Claim 16:

As independent claim 16 requires some similar features to claims 1 and 18, the Examiner has again largely relied on figure 24 of the *Masuda* reference. However, as in claim 1, the Examiner also contends that according to *In re Larson*, it is well known to integrate plural parts so that they may constitute a unitary whole. The Examiner contends that it would have been obvious to integrate the light guiding part, light guiding and emitting part and the touch panel as taught by *An* into a single optically transparent substrate so as to simplify the process of manufacturing thereby reducing the overall cost.

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As mentioned earlier regarding claim 1, none of the cited references appears to suggest combining the features of having the substrate propagate an ultrasonic wave and guide light from the light source. Using the same rationale as discussed in claim 1, Applicants respectfully submit that the Examiner's rejection be withdrawn and the claims allowed.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned agent to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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